1-2005

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Harris, M.M., & Lievens, F. (2005). Selecting employees for global assignments: Can assessment centers measure cultural intelligence? In A. Rahim & R.T. Golembiewski (Eds.) Current Topics in Management (vol. 10) (pp. 221-240). Transaction Publishers: Somerset, NJ.

PART IV

INTERNATIONAL AND CROSS-CULTURAL MANAGEMENT

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SELECTING EMPLOYEES FOR GLOBAL ASSIGNMENTS: CAN ASSESSMENT CENTERS MEASURE CULTURAL INTELLIGENCE?

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Our field is replete with attempts to measure and predict a variety of behaviors in the workplace, including task performance, contextual performance, counterproductive activity, to name but a few. One of the most recent types of behavior that organizations would like to predict is the ability to interact effectively with culturally-dissimilar others. Known by various names, including cultural intelligence or cultural adaptability, there is relatively little research as of yet regarding this topic. Nevertheless, given the growing recognition that the workplace increasingly operates in a global fashion, there is reason to believe that the literature regarding this topic will expand. Furthermore, as we will discuss shortly, to date there has been one dominant theoretical approach to cultural intelligence. We provide a somewhat different approach to this new construct, one which is grounded in established bodies of research in social and Industrial/Organizational (I/O) psychology.

In this chapter, then, we address several issues regarding cultural intelligence. First, we define the construct and briefly summarize the most popular framework to date for cultural intelligence. Second, we briefly describe social psychological theories of personality and how they might be of value in understanding cultural intelligence. Third, we propose that assessment centers might be fruitfully used for measuring cultural intelligence and illustrate this by reanalyzing some findings from Lievens, Har-

ris, Van Keer, and Bisqueret (2003). Fourth, we discuss some practical implications of this chapter. We conclude with avenues for future research regarding cross-cultural intelligence, based on a social psychological approach to personality.

What is Cultural Intelligence?

In the most systematic treatment of cultural intelligence to date, Earley and Ang (2003) defined cultural intelligence as "a person's capability to adapt effectively to new cultural contexts" (p. 59). Recent attempts to develop a measure of cultural intelligence have used similar definitions; Ang, Van Dyne, and Koh (2004) defined cultural intelligence as "an individual's capability to deal effectively in situations characterized by cultural diversity" (p.3). Earley and Ang and their colleagues (e.g., Earley & Ang, 2003; Ang et al., 2004; Earley & Peterson, 2004) linked the construct of cultural intelligence to other types of intelligence, including emotional and social intelligence (Cantor & Kihlstrom, 1985; Goleman, 1998), which emphasize intelligence as the ability to adjust to one's environment (Sternberg, 2000). Earley and his colleagues have also argued that cultural intelligence differs from both emotional intelligence and social intelligence. Specifically, Earley and Ang argued that emotional intelligence, which reflects an individual's ability to interpret and respond to the affective states of others, as well as to regulate one's own affective state, "presumes a degree of familiarity with culture and context that may not exist" (p. 8). Further, Earley and Ang asserted that writing on emotional intelligence has not addressed cross-cultural aspects of emotional intelligence and how the construct fits in that context.

Similarly, Earley and Ang (2003) argued that social intelligence (typically defined as the capacity to understand and manage people) is separate from cultural intelligence, even though these two constructs may be related. Specifically, they stated that cultural intelligence is probably best viewed as a "separate form of intelligence distinct but not superordinate to social intelligence" (p. 9). Thus, while there are certain parallels between cultural intelligence and both emotional intelligence and social intelligence, it has been argued that these are separate and distinct constructs. Despite being separate and distinct constructs, there certainly is some conceptual overlap between emotional and social intelligence on the one hand, and cultural intelligence on the other hand. Indeed, Earley and Ang's (2003) model of cultural intelligence borrows from related theoretical frameworks (e.g., Sternberg & Detterman, 1986).

The dominant model of cultural intelligence has been developed by Earley and Ang and their colleagues. In their framework, cultural intelligence is a multi-faceted structure that includes metacognitive, cognitive,

motivational, and behavioral factors. Specifically, meta-cognitive cultural intelligence refers to the ability to be "culturally mindful" during interactions with individuals from different cultures by adjusting cultural knowledge and using higher-level cognitive strategies. Under the cognitive component, Earley and Ang included such elements as self-knowledge, knowledge of social context, and knowledge of information handling. The motivational component included elements such as self-efficacy and persistence; the behavioral component included habits and practices/rituals.

Based on this theoretical model, Ang et al. (2004) developed and validated a 20-item self-report measure of cultural intelligence, with items tapping meta-cognition (e.g., "I check the accuracy of my cultural knowledge as I interact with people from different cultures"), cognition (e.g., "I know the legal and economic systems of other cultures"), motivation (e.g., "I enjoy interacting with people from different cultures"), and behavior (e.g., "I alter my facial expressions when a cross-cultural interaction requires it"). Templer, Tay, and Chandrasekar (2004) used Ang et al.'s (2004) measure of cultural intelligence and found that several of the factors significantly predicted expatriate work performance, further supporting the validity of this instrument.

Although their framework does reflect an awareness of the potential importance of the situation or culture one is operating in, Earley and Ang's (2003) focus remains on the *trait* aspects of cultural intelligence; they give far less emphasis to the *situation or culture* in which one is operating. The relatively heavy focus on traits is not surprising, as the tradition in I/O psychology in specific, and psychology in general, has been on traits. Nevertheless, research in social psychology, and to a lesser degree, I/O psychology, has given new life to the situation or context. Thus, there is another approach to studying and assessing cultural intelligence that has an even longer history and larger literature. In social psychology, research on personality has led to findings that are relevant to cultural intelligence. Research in I/O psychology on assessment centers provides an applied focus to this area. We discuss both of these topics next in terms of the implications for cultural intelligence. We intend to highlight the role of the situation or context, with the goal of placing greater prominence on the culture in understanding cultural intelligence. We do not wish to imply, however, that Earley and Ang and their colleagues' approach to cultural intelligence is wrong or misguided. Rather, our approach is grounded in a different literature, which may either complement their model or add additional dimensions to their model. Thus, rather than offering a substitute for their model, we view our perspective as providing a different way of looking at cultural intelligence.

Research on Personality

Historically, personality has been somewhat of an enigma. Despite a widely held belief that individuals exhibit consistent patterns of behavior, or personality traits, early researchers found that behavior was inconsistent from situation to situation (e.g., Hartshorne & May, 1928). Years of research yielded similar results, leading researchers to take one of two approaches (Mischel, 2004). One approach was to *eliminate the context* by aggregating behavior across different situations, much like multiple items on a test. The implicit assumption of this approach is that situations represent error variance and that aggregating or averaging across them would cancel them out. We will therefore refer to this as the "situation as error" perspective.

The second approach to the finding that behavior is inconsistent from situation to situation is to assume that *behavior is, in part, a function of the situation*. As succinctly stated by Mischel (2004), the incorporation of the situation means that traits will be "situationally hedged, conditional, and interactive with the situations in which they were expressed" (p. 5). Thus, one needs to know the environment or situation in which the respondent is operating, as well as the respondent's personality traits, in order to predict and understand the behavioral responses that will be exhibited. This approach is referred to as the "person–situation" perspective (Mischel, 2004).

We believe that the latter perspective may provide a rich basis for understanding cultural intelligence. Consider the following quote from Mischel (2004) regarding the person–situation perspective:

> Adaptive behavior should be enhanced by . . . the ability to make fine-grained distinctions among situations—and undermined by broad response tendencies insensitive to context and the different consequences produced by even subtle differences in behavior when situations differ in their nuance. (p. 5)

Although not stated in the context of cultural intelligence, the above quote could easily fit in the realm of cultural intelligence and to how people respond to different cultures.

Borrowing from the person–situation approach, there are three basic possibilities here. One possibility is that an individual's behavior is invariant across cultures; a second possibility is that an individual's behavior varies across cultures, but in a way that is not consistent with what is most appropriate for each culture. A third possibility is that an individual's behavior varies across cultures, in a way that is consistent with what is most appropriate for each culture.

It is noteworthy that while traditional personality theorists have *bemoaned* the finding that behavior appears to be inconsistent from situa-

tion to situation, the cultural intelligence perspective would be that behavior *should vary* from situation to situation (i.e., from culture to culture) as long as the behavior matches what is required by the context. Indeed, the cultural intelligence perspective would assert that for someone operating in different cultures, invariant behavior would be ineffective. Thus, what would be deemed error variance by traditional personality theorists would be considered true variance by cultural intelligence researchers.

The Assessment Center as a Measure of Cultural Intelligence

Very briefly, assessment centers consist of several simulation exercises, completed by job candidates, and their performance in those exercises is evaluated on multiple dimensions by trained assessors using behaviorally-based scoring guides. Over the years, assessment centers have been found to be good predictors of a variety of criteria such as job and training performance (Arthur, Day, McNelly, & Edens, 2003). Assessment centers have also proven their usefulness in a variety of settings (e.g., business, public sector, military, educational) and in many countries (e.g., Lievens et al., 2003).

We believe that assessment centers might also be fruitfully used as a vehicle for selecting international personnel in general and for measuring cultural intelligence in particular. The main reason is that assessment centers enable one to measure both aspects of the person–situation perspective, namely, individuals' standing on traits in different situations. In fact, a primary characteristic of an assessment center is that it is essentially a method that can be used to measure a wide variety of *constructs* (Arthur et al., 2003). Therefore, it should also be possible to measure dimensions related to cultural intelligence. As a second feature, an assessment center presents candidates with different tasks and exercises, which are samples of the content and requirements of the target job. Accordingly, an assessment center provides ways to create simulated *situations* and place individuals in these situations. Typical examples are individual situations (e.g., in-baskets, case analyses), one-on-one situations (e.g., role-plays), or group situations (e.g., leaderless group discussions).

In short, the assessment center approach to cultural intelligence would involve designing exercises that simulate the pertinent cultures. Candidate behavior would be observed and evaluated in terms of their effectiveness on key competencies. Of course, when the assessment center is developed to assess cultural intelligence, some special considerations may be necessary (see Thornton & Mueller-Hanson, 2004, for an overview of how to develop simulation exercises). For example, Briscoe (1997) posited that for an international assessment center, design changes should

include the choice of a broader range of dimensions, a more heterogeneous composition of assessor teams, and the evaluation of performance in light of cultural and national differences in management practice. We echo these kinds of concerns because cultural norms and differences may affect the construction of this kind of assessment center. We believe that it is particularly important to have subject matter experts (SMEs) who are highly familiar with the cultural norms and practices of pertinent cultures and to make sure that there is agreement as to what the appropriate behaviors are in order to create structured scoring procedures that are accurate.

The Role of the Exercise in Assessment Centers. Historically, the focus of assessment centers has been on identifying the relevant dimensions that should be assessed, with the choice of the exercises in which to measure the relevant dimensions considered to be of secondary importance (Sackett & Harris, 1988). A series of studies conducted over the last two decades, however, has led to serious questions as to whether the choice of exercises is really of secondary importance (e.g., Sackett and Dreher, 1982). A recent review by Lance, Lambert, Gewin, Lievens, and Conway (2004) concluded that if a factor analysis was performed on the assessment center ratings, exercise factors play a more prominent role than dimension factors. Stated somewhat differently, dimension ratings (e.g., oral communication) in a particular exercise (e.g., an employee feedback role-play) have little or no correlation with ratings on the same dimension (oral communication) in a different exercise (e.g., leaderless group discussion). At the same time, two different dimensions (e.g., oral communication and delegation) within the same exercise (e.g., leaderless group discussion) will correlate relatively highly. Although there are several different explanations, some researchers (e.g., Sackett & Harris, 1988) have concluded that the right exercises must be used in order for the assessment center to be maximally valid. The practical implication of these findings is that much more attention must be paid to the nature of the assessment center exercises. In measuring cultural intelligence, we argue that this is particularly true.

We propose that the underlying consideration in how predictive the assessment center will be is the exercise fidelity, or the degree to which the assessment center resembles the target job. Thornton and Mueller-Hanson (2004) observed that fidelity can be understood in terms of the degree to which the exercise is similar to the target job with regard to the following five characteristics:

1. Industry. Is the exercise in the same or in a different kind of industry?
2. Content of the problems. Does the exercise cover the kinds of problems that are found in the target job?
3. Importance of the tasks. Does the exercise assess behavior in tasks that are highly important for the target job?

4. Medium for presenting information. Does the exercise match the way in which information is obtained and gathered on the job?
5. Response mode. Does the exercise match the mode used to respond to stimuli in the target job? If feedback is given face-to-face in the target job, for example, is it given the same way in the exercise?

We would add a sixth factor, namely, that to assess cultural intelligence, the exercise should be cast in the relevant culture with appropriate issues and concerns to bring out the relevant behaviors. As an example, if important decisions are made using group consensus, does the exercise enable the candidate to make decisions using group consensus or does the construction of the exercise preclude this approach?

It is noteworthy that Thornton and Mueller-Hanson (2004) do not recommend that assessment centers should always have the most fidelity possible. They provide some instances where highly fidelity to the target job may not necessarily be desirable, such as when the purpose is to assess long-term potential or in order to create a simulation that will be neutral to all candidates. If the goal is to assess cultural intelligence, however, we would argue that high fidelity to the target culture(s) is essential.

Overview of the Lievens et al. (2003) Study. A variety of the factors described earlier were considered in the design of the assessment center studied in Lievens et al. (2003). The selection process was developed to select European executives for an 18-month cross-cultural training program (referred to as the Executive Training Program or ETP) on how to do business with the Japanese. In line with common assessment center practices, the assessment center described here measured various sub-dimensions (tenacity/resilience, teamwork, communication, adaptability, and organizational and commercial awareness). Selection of these dimensions was based upon several factors, including the objectives of the Executive Training Program, an analysis of the current role requirements and skills present in successful participants of the Executive Training Program, and a review of the extant literature on cultural intelligence and expatriate adjustment. Definitions of each of these dimensions can be found in Table 1. An overall cultural intelligence dimension was not measured here, a point which we comment on later.

Two assessment center exercises were developed for the selection process. A group discussion with assigned roles was chosen because this type of situation was seen as crucial in the team-based learning inherent in the ETP and in Japan generally. In the group discussion exercise, each participant was required to assume the role of a manager of a medium-small company. Each manager had a different functional role in the company. The objective consisted of reaching consensus on cost reductions. Note also that the composition of the assessee groups was heterogeneous as

Table 1
Dimensions Rated in the Each Assessment Center Exercise

Dimensions	Analysis / presentation	Group discussion
1. **Tenacity/resilience** (keeps difficulties in perspective, stays positive despite disappointments and setbacks, continues to strive for a goal even in the face of adversity)	X	
2**. Teamwork** (co-operates and works well with others in the pursuit of team goals, shares information, develops supportive relationships with colleagues and creates a sense of team spirit)		X
3. **Communication** (is able to communicate clearly, fluently, and to the point, talks at a pace and level which holds people's attention, both in group and individual situations)	X	X
4. **Adaptability** (adapts readily to new situations and ways of working, receptive to new ideas. willing and able to adjust to changing demands and objectives)	X	X
5. **Organizational and commercial awareness** (is aware of organizational issues and alert to changing dynamics with the organization, knowledgeable about financial and commercial matters, focuses on profits, markets, and new business opportunities, which will bring the largest return)	X	X

"X" indicates that the dimension is assessed in that exercise.

executives from 15 different European countries participated in the selection procedure. As a second exercise, an analysis/presentation exercise was chosen because the executives would be frequently asked to make presentations in the ETP. In the analysis/presentation exercise, each candidate was required to assume the role of a consultant and to analyze a complex set of facts and figures relating to various departments of a medium-sized organization. Each candidate had to determine the strategies for the next five years and to present these strategic recommendations. Apart from these two assessment center exercises, the selection procedure for the cross-cultural training program also included a cognitive ability test, a personality inventory, and a structured interview. Eighty-six of the 166 executives (125 males and 41 females; average age of 29.3 years) were selected for the ETP. Additional information can be found in Lievens et al. (2003).

Two kinds of criteria were gathered for this study, but we only focus here on performance data gathered from the trainers in the cross-cultural training program. These trainers received questionnaires containing relevant performance dimensions after the executives had completed the

training program (i.e., after 18 months). None of the trainers was familiar with the executives' evaluation at the time of the selection in Europe. Trainers were required to rate the executives on each of the relevant performance dimensions using a 5-point rating scale, ranging from *poor* (1) to *outstanding* (5). Given the relatively high correlations among performance dimensions, we computed a composite measure of cross-cultural training performance (á = .79).

We present some new analyses from Lievens et al. (2003) for two reasons. First, in accord with our discussion above about the importance of the situation, as well as past research on assessment center exercises, we would expect that there might be validity differences between our two exercises. Although there has been much research as to whether assessment center ratings reflect exercise factors or dimension factors, there has been almost no research as to whether some exercises are more valid predictors of future performance than other exercises.

Second, Arthur et al. (2003) argued that validation studies have focused too heavily on the selection *method* (e.g., interview, assessment center, personality test) rather than the relevant selection trait or *construct* (e.g., flexibility, adaptability, persuasiveness). They argued that the problem with this strategy, which is the typical approach used (henceforth referred to as method-driven), is that the incremental validity might have resulted from the use of a different selection method (interview, assessment center, etc.) *or* from the fact that the predictor tapped other constructs (adaptability, etc.). Therefore, a second analytical strategy for examining incremental validity is *construct-driven*. Here, one holds the construct under investigation constant. At a minimum, we need to separate out possible method results from construct (i.e., trait) results. Towards that end, we compare the results from the method-driven approach to the construct-driven approach.

Comparing Exercise Validity. To determine whether there was a difference in the validity of our two exercises, we compared the correlations between each of the dimensions rated in our two exercises and our criterion (i.e., training performance). For the group discussion exercise, we found statistically significant correlations for all four dimensions: Adaptability (r =.31), Communication (r =.28), Team work (r =.30), and for Organizational/ commercial awareness (r =.25). For the analysis-presentation exercise, none of the correlations was statistically significantly. Specifically, we found the following: r =.06 (for Communication), r =.11 (for Adaptability), r = .10 (for Tenacity), and r =.13 (for Organizational/commercial awareness). Thus, the group discussion exercise was more valid than the analysis-presentation exercise, even though they are ostensibly assessing some of the same dimensions. Stated somewhat differently, when it comes to validity, it appears that the exercise does make a difference.

This, in turn, supports our argument that assessment exercises must be carefully designed.

Incremental Validity: Method-driven Versus Construct-driven. We conducted hierarchical regression analyses for examining the incremental validity of assessment center exercises over and above more traditional predictors such as cognitive ability tests, personality inventories, and a structured interview. In a *method-driven* analytical strategy, one examines whether a given predictor adds incremental variance over another predictor, regardless of the constructs measured. This issue is particularly relevant here if we assume that different methods (e.g., interview, paper-and-pencil test, simulation exercise) reflect different situations (Harris, 1999). To test the method-driven approach, we entered the Big Five personality factors and cognitive ability in the first step. In the second step, we entered the structured interview ratings. In the third step, the two assessment center exercises were entered. Results are provided in Table 2. As shown in Table 2, even when cognitive ability, personality, and the structured interview were included as predictors, the assessment center exercises explained additional variance in cross-cultural training performance. The final R^2 was .39.

To assess these data using the construct-driven approach, we also analyzed the data by conducting a hierarchical regression analysis in which we entered one Big Five personality factor (e.g., Openness) and cognitive ability in the first step. In the second step, we entered a *conceptually related dimension* (e.g., Adaptability) as measured by the analysis/presentation exercise and the group discussion exercise. Hence, we could examine whether Adaptability as measured by the analysis/presentation exercise and the group discussion exercise added additional variance over cognitive ability and the conceptually related personality trait of Openness. Similar analyses were conducted for the other Big Five factors.

Results using this approach are presented in Table 3 (see also Lievens et al., 2003). This analysis revealed that three dimensions accounted for a significant amount of additional variance in cross-cultural training performance over the other predictors. Teamwork significantly explained additional variance in our criterion over and beyond cognitive ability and Agreeableness. Communication accounted for a significant additional portion of the variance in training performance over and beyond cognitive ability and Extraversion. Adaptability added a significant amount of variance over cognitive ability and Openness. The highest final R^2 obtained equaled .31 (with cognitive ability, Agreeableness, and the team work ratings as predictors). It should be observed that this is a relatively high amount of variance explained in training performance, particularly in light of the fact that this is a new area of research. Note, however, that the dimensions of Teamwork, Communication, and Adaptability added a

Table 2
Summary of Method-driven Hierarchical Regression Analyses for Selection Instruments Predicting Cross-cultural Training Performance Ratings

Predictors	β	R^2	ΔR^2
Step 1			
Cognitive ability	.05		
Emotional Stability	.07		
Extraversion	.08		
Agreeableness	–.14		
Conscientiousness	.12		
Openness	.23*	.18	.18*
Step 2			
Structured interview	.23*	.26	.09**
Step 3			
Analysis/presentation	.07		
Group discussion	.35**	.39	.13**

Note. $N = 77$
Parameter estimates are for third step, not entry.
* $p < .05$.
** $p < .01$.
*** $p < .001$.
Because multivariate range restriction and criterion unreliability might affect the regression results, we applied the appropriate multivariate corrections to the correlation matrix and used this corrected matrix as input for the hierarchical regression analyses. Statistical significance was determined prior to applying the corrections (by conducting hierarchical regressions on the uncorrected matrix of correlations).

significant amount of variance in predictions of cross-cultural training performance *only* when measured in the group discussion exercise.

To summarize, somewhat different results were obtained, depending on whether a method-driven or a construct-driven incremental validity analysis was performed. The results suggest that one needs to consider both the specific construct and the particular exercise in understanding whether the rating has incremental validity in predicting cross-cultural training performance.

Table 3
Summary of Construct-driven Hierarchical Regression Analyses for Selection Instruments Predicting Cross-cultural Training Performance Ratings

Models	Predictors	β	R^2	ΔR^2
Step 1	Cognitive ability	.18		
	Emotional Stability	.08	.05	
Step 2	Tenacity (analysis/presentation)	.20		
	Tenacity (interview)	–.05	.08	.04
Step 1	Cognitive ability	.08		
	Extraversion	–.04	.04	
Step 2	Communication (group discussion)	.43**		
	Communication (analysis/presentation)	.10	.25	.21*
Step 1	Cognitive ability	.05		
	Openness	.32**	.14*	
Step 2	Adaptability (analysis/presentation)	.11		
	Adaptability (group discussion)	.34*	.29	.15
Step 1	Cognitive ability	.04		
	Agreeableness	–.28*	.10	
Step 2	Teamwork (interview)	.15		
	Teamwork (group discussion)	.41*	.31	.21*

Note. N = 77. Estimates are for second step, not entry. The same input correlation matrix as in Table 2 was used. Due to rounding, ÄR^2 differs .01 from Cumulative R^2.
* $p < .05$
** $p < .01$

Discussion

Recently, there has been a growing interest in the construct of cultural intelligence (Earley & Ang, 2003; Templer et al., 2004; Ang et al., 2004). Prior studies have used self-report questionnaires to measure cultural intelligence (Ang et al., 2004; Templer et al., 2004). In this chapter, following Lievens et al. (2003), we discussed the use of a different approach. Instead of the self-report questionnaires, we posited that assessment cen-

ters might be useful tools for measuring cultural intelligence. A main advantage of assessment centers over that approach to measuring cultural intelligence is that the assessment center approach allows one to measure the person–situation aspects of cultural intelligence. Rather than assessing general cultural intelligence, then, the assessment center approach we used here assumes that an individual might be more effective in certain cultures, but not other cultures.

Given that dimensions and exercises are vital parts of the assessment center paradigm, we conducted both method (exercise-driven) and construct (dimension-driven) analyses, and compared the validity of our two exercises separately. Generally, our results showed that assessment centers might be a viable method for measuring the person–situation aspects of cultural intelligence and for selecting international personnel. In particular, the various dimensions measured in a group discussion exercise showed reasonable validity for performance in a cross-cultural training program. Conversely, the dimensions measured in the other assessment center exercise (analysis/presentation) were not predictive. The implication of these results for the debate on assessment center dimensions versus exercises (e.g., Sackett & Dreher, 1982; Lance et al., 2004) is that the nature of the exercise appears to play a crucial role in how valid the dimension ratings are. The implication for measuring cultural intelligence is that some exercises will be more valid for predicting future cross-cultural success than others. This supports the "person–situation" perspective, rather than the "situation as error" perspective.

Limitations

In terms of the results from the Lievens et al. (2003) study, some possible shortcomings should be noted. A first possible limitation is that this study has a relatively small sample size. Although this limitation is inherent in most studies with international managers, only studies with a larger sample size can provide a more definite answer to the effects of exercise/dimensions on predictive validity. Over time, with the accumulation of more research, a meta-analysis may be helpful. Second, this study involves European managers participating in cross-cultural training; whether similar findings would be obtained with managers from other countries and cultures is unknown. Third, we measured cultural intelligence on the basis of various sub-dimensions. Some people might argue that Adaptability was the only sub-dimension that was clearly related to cultural intelligence. Generally, as discussed in more detail below, we believe that it is better to operationalize a multifaceted construct such as cultural intelligence using various sub-dimensions and accompanying behavioral anchors than measuring the whole construct per se.

Implications for Management

On the basis of our results, the following set of recommendations can be made for practitioners interested in designing assessment centers for cultural intelligence (see also Briscoe, 1997). First, practitioners should be sure to assess all of the relevant competencies. Recall that Lievens et al. (2003) did not measure an overall dimension called "cultural intelligence." The rationale for that decision is as follows. Cultural intelligence was defined as an individual's ability to "deal effectively in situations characterized by cultural diversity" (Ang et al., 2004). We would argue that there may be differences in an individual's competencies with regard to culturally diverse situations. For example, one's communication may be effective in a different culture, but one may be ineffective in terms of teamwork in that same culture. Thus, rather than having an overall cultural intelligence rating, we believe it is more beneficial for scoring purposes, as well as for feedback purposes, to have separate ratings on different behavioral dimensions. We also suggest that researchers develop a taxonomy of behavioral dimensions for cultural intelligence (see Harris, 2004, for a possible list of sub–dimensions of cultural intelligence).

Second, designing simulations to assess cultural intelligence must involve determining what the appropriate exercises are. One cannot simply assume that any exercise is appropriate. In particular, practitioners should incorporate cultural and national differences in management practice into the design of simulation exercises. For instance, people who are being selected for working in an individualistic culture should especially perform in individual exercises. Conversely, group exercises, which require team-based decision making, are to be preferred for people who are being selected for working in a collectivist culture. It would appear that using the wrong exercises may lead to the inability to accurately predict future performance in cross-cultural situations.

Third, in terms of the composition of assessor teams, it is to be recommended that assessors come from varying cultural backgrounds (e.g., from both the sending and the receiving country). Similar guidelines should be considered with regard to the cultural background of role-players.

Fourth, how the behaviors of candidates will be evaluated must be considered carefully. A problem with the evaluation of people who will have international assignments is that the effectiveness of their behavior may vary according to the specific culture. Therefore, it is crucial that, prior to observing and evaluating candidates, subject matter experts (SMEs) reach consensus on what are effective and ineffective behaviors for each dimension. To this end, the culture of the host country may serve as the frame-of-reference. At a minimum, assessors should be aware of this frame-of-reference and possible cross-cultural differences in management effectiveness.

Finally, we have touted the virtues of the assessment center here. While others have used self-report questionnaires (e.g., Ang et al., 2004), we continue to assert that there are some significant advantages to the assessment center method. First, use of an assessment center allows for the evaluation of cultural intelligence even if the candidate has never been in that kind of situation before. Second, the assessment center approach is more useful for developmental suggestions and feedback. Third, it is more difficult to fake an assessment center than a self-report questionnaire. The assessment center does, of course, cost more than a questionnaire approach, but we would argue that the advantages we listed here for the assessment center will often outweigh the potential costs.

Directions for Future Research

We have called here for a greater role of the situation, or culture, in theories of cultural intelligence. Towards that end, there is need for much more research. First, we need a model or framework of cultures in order to understand how they affect the behavior of someone from another culture. Fortunately, there are several models of culture, incorporating various dimensions, that have been developed, including Hofstede's model (e.g., Hofstede, Neuijen, Ohayv, & Sanders, 1990, incorporating the five major dimensions of individualism/collectivism, masculinity/femininity, uncertainty avoidance, power distance, and short-term/long-term orientation) and the GLOBE model (e.g., House, Javidan, Hanges, & Dorfman, 2002; incorporating nine dimensions, including performance orientation, future orientation, and assertiveness). These cultural dimensions may suffice to understand cultures and how they differ from one another. Of course, whether these models of culture help one to predict and understand cultural intelligence within different cultures is unknown. For example, will an individual behave similarly in cultures that are similar in terms of the relevant dimensions? In other words, is an individual who is effective in one country also effective in a different country that is similar in terms of the relevant cultural dimensions? Alternatively, it is conceivable that behavior is not affected by these particular dimensions of culture. In other words, individuals' behavior may reflect cues that are not measured by these dimensions.

Second, are there differences in the kinds of cross-cultural situations in which one will be effective? That is, is cultural intelligence specific to certain cultures or does it generalize across cultures? The questionnaire used by Ang et al. (2004) presumes that cultural intelligence generalizes across cultures and therefore represents a universal trait. Social psychology, and research on assessment centers, indicates that behavior frequently is not consistent across situations. The answer to this question has obvi-

ous practical implications. Deciding which employee to place in a different culture, for example, may require consideration of employees' efficacy in dealing with that particular culture. Alternatively, it is possible that individuals who demonstrate high levels of cultural intelligence in one culture are also effective in other cultures.

Third, what makes some people more effective than others in cross-cultural situations? It may be that people who are ineffective in cross-cultural situations fail to recognize that different behavior patterns must be displayed. Or, they recognize that their behavior must change, but they don't understand when to do what. Alternatively, people who are ineffective in cross-cultural situations may be aware of what they need to do, but are unable to exhibit different behaviors. We suspect that low levels of cultural intelligence may exist for several reasons; people may not recognize that there are cultural differences and they may not know what the appropriate behaviors are. Finally, they may know what to do, but are either unwilling, or unable, to exhibit the appropriate behaviors. Again, there are practical implications, depending on which of these explanations is correct. Similarly, training for cultural intelligence would need to differ, depending on the circumstances. If a problem is the failure to recognize that different situations call for different behavior patterns, then training would need to focus on how to identify the correct behavior to demonstrate. Alternatively, if the problem is a lack of the correct behavioral repertoire, then training would need to focus on developing the appropriate behavioral repertoire.

Fourth, we noted in the introduction that cultural intelligence differs from, but at the same time there may be some conceptual linkages with, emotional intelligence and social intelligence. That being the case, we recommend that empirical research be conducted to determine whether in fact these constructs are empirically distinct.

Instrument development is also needed if we are to effectively measure cultural intelligence using the assessment center technique. Recall earlier that the Lievens et al. (2003) study used two different assessment center exercises. One of these exercises was designed to capture consensus building behavior in a group setting, which reflected the training situation, as well as the general Japanese context (recall that the purpose of the ETP was to prepare European managers for working in Japan). The second exercise was designed to assess analysis and presentation skills because the training would make much use of presentations. There are several possible reasons why the first exercise was valid, but not the second exercise. One possibility is that the former exercise did indeed capture key elements of the ETP (and Japanese) culture, and therefore it had considerable cultural fidelity with regard to the actual context for which candidates were being selected. Alternatively, the second exercise may not have

represented key elements of the ETP (and Japanese) culture and therefore may have had only limited cultural fidelity. Highhouse and Harris (1993) used a quantitative measure for assessing the similarity among different assessment center exercises; perhaps assessment center exercise "culture" could be measured using either Hofstede's paradigm or the GLOBE paradigm to make sure that each exercise is similar to the culture which it is being used to simulate.

We have argued that the assessment center paradigm could be used to assess cultural intelligence, and we would assert that this is accomplished by using exercises that match the culture in terms of key features and then assessing requisite skills in that context. Consider, for example, giving feedback to poorly performing employees. Artise (1995) described major differences in how performance evaluations are received by employees from different cultures; specifically, he argued that Korean workers expect managers to be quite direct with them in discussing performance. Managers must therefore be "clear and emphatic" in describing their performance expectations. Furthermore, Artise indicated that telling Korean workers exactly how you would like them to perform the work would be considered quite acceptable. By way of contrast, Artise cautioned against getting to the point right way when addressing French workers, and therefore managers must preface discussions of deficiencies with "excuse making" language. He warned about the dangers of directly telling French workers exactly what they need to do differently to fix a performance problem. It would seem reasonable that by creating assessment center exercises (e.g., role-plays that require candidates to give feedback to a poorly performing employee) which vary the cultural context, one could determine whether behavior changes from situation to situation, and whether candidates possess the requisite cultural intelligence to function in a particular country.

Conclusion

Recall that we stated in the beginning of this chapter that our approach to cultural intelligence should *not* be viewed as a critique of Earley and Ang's (2003) model and subsequent work by their colleagues. Indeed, we believe that the two approaches could, in many ways, be reconciled. One way to reconcile these two models is to view the Earley and Ang model as providing the underlying mechanisms by which individuals decide whether to alter their behavior in different contexts. Furthermore, the assessment center by no means stands in opposition to the Earley and Ang model; rather, the assessment center is a different method for addressing the constructs measured by Ang et al. (2004). We believe that the major difference between our perspective and the Earley and Ang model is that we emphasize the potential importance of the culture and its unique ef-

fects on cultural intelligence, while the Earley and Ang model emphasizes the trait component of cultural intelligence. We believe that research on both approaches is needed in order to fully comprehend this construct.

In conclusion, research regarding cultural intelligence is in its infancy. This construct is still in need of more good theory. We urge researchers to build the culture/situation into discussions of cultural intelligence. Without the addition of this component, investigators may be unable to explain some important variance. Future researchers should test hypotheses that incorporate both our perspective as well as the Earley and Ang perspective on cultural intelligence. Managers deciding which employees should be chosen for a cross-cultural assignment should consider the most appropriate way to assess their cultural intelligence. In this paper, we have focused on the assessment center method. Harris (2004) has discussed other ways, such as the interview, for assessing cultural intelligence.

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